Mr. Daniel Swartz Colonial Brick Corporation 817 West Park Street Cayuga, IN 47928

Re: 165-15184

First Significant Permit Modification to

Part 70 No.: T 165-7633-00002

Dear Mr. Daniel Swartz:

Colonial Brick Corporation was issued Part 70 operating permit T 165-7633-00002 on January 15, 1999, for a clay processing and brick manufacturing operation. A letter requesting changes to this permit was received on January 7, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. A revised permit is attached.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please contact Alic Bent, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, ext. 3206 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments AB/EVP

cc: File - Vermillion County

Air Compliance Section Inspector - Jim Thorpe Compliance Data Section - Karen Nowak Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

### Colonial Brick Corporation 817 West Park St., Cayuga, Indiana 47928

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T165-7633-00002				
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: January 15, 1999 Expiration Date: January 15, 2004			
First Significant Permit Modification: T165-15184-00002	Pages Affected: 5, 30, 31, 34, 40 and 41			
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:			

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SOURCE SUMMARY

#### **SECTION A**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] A.1

The Permittee owns and operates a stationary clay processing and brick manufacturing plant.

Responsible Official: Daniel A. Swartz

Source Address: 817 West Park Street, Cayuga, Indiana, 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928

SIC Code: 3251 County Location: Vermillion

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

The source consists of the following permitted emission units and pollution control devices:

- (a) One brick firing operation, consisting of the following equipment:
  - (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 1043.38 pounds of brick per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998),
  - (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 1556.74 pounds of brick per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998), and
- One (1) grinder operation, operating within the grinder building, which has no exhaust, (b) consisting of the following equipment:
  - One (1) Cayuga Brick Clay Grinder, identified as UV-9, with a maximum capacity (1) of 12.8 tons of raw clay per hour,
  - (2) One (1) Maco Apron conveyer, with a maximum capacity of 15 tons of raw clay per hour, operating within the grinder building, which has no exhaust,
  - (3)One (1) shop built apron conveyor, with a maximum capacity of 15 tons of raw clay

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per hour,

- (2) One (1) McClanahan Single Roll 24" x 36" crusher, with a maximum capacity of 20 tons of raw clay per hour,
- (3) Two (2) Leahy screens, with a maximum capacity of 15 tons of raw clay per hour,
- (4) One (1) Crushed Clay hopper, with a maximum capacity of 15 tons of raw clay per hour, and
- (5) One (1) Ground Clay hopper, with a maximum capacity of 15 tons of raw clay per hour.

due to limited throughput at the drier, the grinding operation is automatically limited to 12.96 tons per hour.

# A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Paved and unpaved roads and parking lots with public access.
  - (1) One (1) crushed brick pit road, identified as ID-14.
- (c) Conveyors as follows:
  - (1) Uncovered coal conveying of less than or equal to 120 tons per day.
- (d) Other activities or categories not previously identified with emissions below insignificant thresholds:
  - (1) One (1) coal pile, identified as ID-10, with a maximum capacity of 40 tons,
  - (2) One (1) fuel storage pile, identified as ID-11, with a maximum capacity of 100 tons, and
  - (3) One (1) sand pile identified as ID-13, with a maximum capacity of 20 tons.

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

**SECTION B** 

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### GENERAL CONDITIONS

#### B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

#### B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

#### B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

#### B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

#### B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

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Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

#### B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the

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status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
  - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

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- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

#### B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency,

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or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:

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- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
  - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
  - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

#### B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

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- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
- (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM has issued the modification. [326 IAC 2-7-12(b)(8)]

#### B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

#### B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or

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- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

# B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

#### B.18 Permit Renewal [326 IAC 2-7-4]

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prescribed by IDEM, OAM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch. Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM any additional information identified as being needed to process the application.
- United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] (d) If IDEM, OAM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

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whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

# B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

#### B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

#### B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326

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IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and

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(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

#### B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

#### B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
   [326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information

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removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAM acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

#### B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

#### B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

#### B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

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#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### Entire Source

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment

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are in operation.

#### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

#### C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and
  40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for
  any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3)
  square feet on any other facility components or a total of at least 0.75 cubic feet on all
  facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-7-6(1)]

#### C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

### C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such

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requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

#### C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

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#### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

#### C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

#### C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and

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submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

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- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
- (3) An automatic measurement was taken when the process was not operating; or
- (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

# C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

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#### C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

#### C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

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- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

#### C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly

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describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Stratospheric Ozone Protection**

#### C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

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- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] One brick firing operation, consisting of the following equipment:

- (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 1043.38 pounds of brick per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998), and
- (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 1556.74 pounds of brick per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 the source shall:

- (a) process less than 1055.0 pounds of brick per hour, which is equivalent to less than 4,621 tons per twelve (12) consecutive month period for kiln 4. This process limit is required to limit the potential to emit of SO<sub>2</sub> to less than 16.64 tons (based on an emission factor of 7.2 lb of SO<sub>2</sub> / ton brick used) per 12 consecutive month period from kiln 4;
- (b) use less than 475.0 pounds of fuel per hour, which is equivalent to less than 2,081 tons per twelve (12) consecutive month period for kiln 4. This usage limit is required to limit the potential to emit of SO<sub>2</sub> to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12 % and an emission factor of 22.23 lb of SO<sub>2</sub> / ton fuel used) per 12 consecutive month period from kiln 4.

These usage limits are required to limit the potential to emit of SO<sub>2</sub> from kiln 4 to less than 40 tons per 12 consecutive month period and make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1-1 (Sulfur Dioxide Emissions Limitations):

- (a) The SO<sub>2</sub> emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed six (6) pounds per mmBtu of coal combustion.
- (b) The sulfur content of the coal delivered to the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 4.12% by weight, providing the fuel mixture remains 57% coal and 43% sawdust.

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#### D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations):

- (a) The allowable PM emission rate from each of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) shall not exceed 2.65 pounds per hour when each operating at a process weight rate of 1043.38 pounds per hour.
- (b) The allowable PM emission rate from each of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 3.46 pounds per hour when each operating at a process weight rate of 1556.74 pounds per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and SO<sub>2</sub> testing on one of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and one of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) to verify stack data by the Permittee, utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, and Methods 6, 6A, 6C, or 8 for SO<sub>2</sub>, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.1.6 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed six (6.0) pounds per MMBtu. Compliance shall be determined utilizing one of the following options:

- (a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:
  - (1) The name of the coal supplier; and

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- (2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and
- (3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
- (4) The methods used to determine the properties of the coal; or
- (b) Coal sampling and analysis shall be performed using one of the following procedures:
  - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
    - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
    - (B) Coal shall be sampled at least one (1) time per day;
    - (C) Minimum sample size shall be five hundred (500) grams;
    - (D) Samples shall be composited and analyzed at the end of each calendar month;
    - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
  - (2) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11), using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above

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shall not be refuted by evidence of compliance pursuant to the other method.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.7 Visible Emissions Notations

- (a) Visible emission notations of all the kiln stack exhausts shall be performed once per shift during normal daylight operations on days 2, 3, and 4 of the firing cycle when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during days 2, 3, and 4 of the firing cycle.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the PM and SO2 emission limits established in D.1.1, D.1.2 and D.1.3.
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Actual coal usage since last compliance determination period; and
  - (3) Sulfur content, heat content, and ash content; and
  - (4) Sulfur dioxide emission rates; and
  - (5) Vendor analysis of coal and coal supplier certification, if the vendor analysis is used to determine compliance.
- (b) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity

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greater than or equal to one hundred (100) MMBtu per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAM.

- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) stack exhaust.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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#### SECTION D.2

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] One (1) grinder operation, operating within the grinder building, which has no exhaust, consisting of the following equipment:

- (a) One (1) Cayuga Brick Clay Grinder, identified as UV-9, with a maximum capacity of 12.8 tons of raw clay per hour,
- (b) One (1) Maco Apron conveyer, with a maximum capacity of 15 tons of raw clay per hour, operating within the grinder building, which has no exhaust,
- (c) One (1) shop built apron conveyor, with a maximum capacity of 15 tons of raw clay per hour,
- (d) One (1) McClanahan Single Roll 24" x 36" crusher, with a maximum capacity of 20 tons of raw clay per hour,
- (e) Two (2) Leahy screens, with a maximum capacity of 15 tons of raw clay per hour,
- (f) One (1) Crushed Clay hopper, with a maximum capacity of 15 tons of raw clay per hour, and
- (g) One (1) Ground Clay hopper, with a maximum capacity of 15 tons of raw clay per hour.

due to limited throughput at the drier, the grinding operation is automatically limited to 12.96 tons per hour.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations) the allowable PM emission rate from the grinder operation shall not exceed 22.81 pounds per hour when each operating at a process weight rate of 25,927 pounds per hour (equivalent to 12.96 tons per hour).

The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

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#### **Compliance Determination Requirements**

#### D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the grinder operation exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1 and D.2.4, the Permittee shall maintain records of daily visible emission notations of the grinder operation exhaust.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

### PART 70 OPERATING PERMIT CERTIFICATION

This certification shall be included when submitting monitoring, testing reports/results

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana, 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana, 47928

Part 70 Permit No.: T165-7633-00002

or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

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#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT

**COMPLIANCE DATA SECTION** P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

#### **PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana, 47928

P.O. Box 365, Cayuga, Indiana, 47928 Mailing Address:

Part 70 Permit No.: T165-7633-00002

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This form consists of 2 pages					
Chec	Check either No. 1 or No.2				
<b>9</b> 1		This is C	an emergency as defined in 326 IAC 2-7-1(12)  The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16		
9 2	2.	This is	a deviation, reportable per 326 IAC 2-7-5(3)(c) The Permittee must submit notice in writing within ten (10) calendar days		

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:

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Describe the cause of the Emergency/Deviation:	
f any of the following are not applicable, mark N/A Page 2 of 2	=
Date/Time Emergency/Deviation started:	-
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:	
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:	
Form Completed by: Title / Position:	

First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP Page 42 of 45 OP No. T165-7633-00002

Date:
Phone:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **Part 70 Quarterly Report**

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana 47928

Part 70 Permit No.: T165-7633-00002

Facility: Kiln 4

Parameter: Sulfur Dioxide (SO<sub>2</sub>)

Limit: process less than 4,621 tons of brick per twelve (12) consecutive month period at

kiln 4. This process limit is required to limit the potential to emit of  $SO_2$  to less than 16.64 tons (based on an emission factor of 7.2 lb of  $SO_2$  / ton brick used) per 12

consecutive month period from kiln 4 due to raw material processing.

YEAR: \_\_\_\_\_

Month	brick usage this month (tons)	brick usage previous 11 months (tons)	brick usage last 12 months (tons)
Month 1			
Month 2			
Month 3			

9	No deviation occurred in this month.
9	Deviation/s occurred in this month.  Deviation has been reported on:

Colonial Brick Corporation

Cayuga, Indiana Permit Reviewer: PR/EVP

#### First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP

Page 43 of 45 OP No. T165-7633-00002

Submitted by:	
Title/Position:	
Signature:	
Date:	
Phone:	

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **Part 70 Quarterly Report**

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana 47928

Part 70 Permit No.: T165-7633-00002

Facility: Kiln 4

Parameter: Sulfur Dioxide (SO<sub>2</sub>)

Limit: use less than 2,081 tons of fuel per twelve (12) consecutive month period for

kiln 4. These usage and fuel sulfur content limits are required to limit the potential to emit of  $SO_2$  to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12% and an emission factor of 22.23 lb of  $SO_2$  / ton fuel used) per 12

consecutive month period from kiln 4 due to fuel usage.

YEAR:		

Month	fuel usage this month (tons)	fuel usage previous 11 months (tons)	fuel usage last 12 months (tons)
Month 1			
Month 2			
Month 3			

#### First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP

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9	9 Deviation/s occurred in this month.  Deviation has been reported on:				
Title/	_				
		Attach	a signed certification to comp	lete this report.	
INDIA	NA DEPA	OFFICE OF	F ENVIRONMENTAL MARIANT AIR MANAGEMENT ICE DATA SECTION	ANAGEMENT	
•	QUARTER		PERATING PERMIT IANCE MONITORING R	REPORT	
Source Address: 8	317 West Par P.O. Box 365	, Cayuga, India	ga, Indiana, 47928 ına, 47928		
	Months:	to _	Year:		
this permit. This reprequirements and the necessary. This for	port shall be ne date(s) of m can be su	submitted quar each deviation pplemented by	met all the compliance monitority. Any deviation from the omust be reported. Additional attaching the Emergency/Devoox marked "No deviations occ	compliance monitoring pages may be attached if riation Occurrence Report.	
9 NO DEVIATIONS	OCCURRE	THIS REPOR	TING PERIOD		
9 THE FOLLOWING	G DEVIATION	NS OCCURREI	THIS REPORTING PERIOD		
Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)  Number of Deviations  Date of each Deviation					

Colonial Brick Corporation Cayuga, Indiana Permit Reviewer: PR/EVP	First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP	Page 45 of 45 OP No. T165-7633-00002	
Form Completed By: Title/Position: Date: Phone:			

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Part 70 Significant Permit Modification

Source Name: Colonial Brick Corporation

**Source Location:** 817 West Park St., Cayuga, Indiana 47928

SIC Code: 3251
County: Vermillion
Operation Permit No.: T165-7633-00002

Significant Permit Modification No.: 165-15184-00002
Permit Reviewer: Alic Bent/EVP

On May 14, 2002, the Office of Air Quality (OAQ) had a notice published in the Daily Clintonian, Clinton, Indiana, stating that Colonial Brick Corporation had applied for a Part 70 Significant Permit Modification to the clay processing and brick manufacturing plant. The notice also stated that OAQ proposed to issue a Part 70 Significant Permit Modification for this operation and provided information on how the public could review the proposed Part 70 Significant Permit Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Significant Permit Modification should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the Significant Permit Modification. Bolded language has been added and the language with a line through it has been deleted.

#### 1. D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

There were errors in the tons per year values in D.1.1 (a) and (b) and in the quarterly reporting forms. The calculations in Appendix A: page 5 were correct, but these values were not incorporated correctly into the permit. The tons per year values in the permit have been revised to reflect the correct values.

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 the source shall:

- (a) **process** use less than 1055.0 pounds of brick per hour, which is equivalent to less than 240.87 **4,621** tons per twelve (12) consecutive month period for kiln 4. This usage **process** limit is required to limit the potential to emit of SO<sub>2</sub> to less than 16.64 tons (based on an emission factor of 7.2 lb of SO<sub>2</sub> / ton brick used) per 12 consecutive month period from kiln 4;
- (b) use less than 475.0 pounds of fuel per hour, which is equivalent to less than  $\frac{108.45}{2,081}$  tons per twelve (12) consecutive month period for kiln 4. This usage limit is required to limit the potential to emit of  $SO_2$  to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12 % and an emission factor of 22.23 lb of  $SO_2$  / ton fuel used) per 12 consecutive month period from kiln 4.

#### First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP

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## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

		Part 7	70 Quarterly Report	
Source Address: 817 We Mailing Address: P.O. Bo Part 70 Permit No.: T165-76 Facility: Kiln 4 Parameter: Sulfur D process period a less tha		I Brick Corporation est Park Street, Cayuga, Indiana 47928 ex 365, Cayuga, Indiana 47928 ex 365, Cayuga, Indiana 47928 ex 3633-00002  Dioxide (SO <sub>2</sub> ) ex less than 240.87 4,621 tons of brick per twelve (12) consecutive month eat kiln 4. This process limit is required to limit the potential to emit of SO <sub>2</sub> in 16.64 tons (based on an emission factor of 7.2 lb of SO <sub>2</sub> / ton brick er 12 consecutive month period from kiln 4 due to raw material processing		
		YEAI	₹:	
Month	Month brick usage this month (tons)		brick usage previous 11 months (tons)	brick usage last 12 months (tons)
Month 1				
Month 2				
Month 3				
	9 Deviation/s	occurred as been	ed in this month. d in this month. reported on:	

Attach a signed certification to complete this report.

#### First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP

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## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

		Dort 7	Ougstarly Banast	
		Part 7	0 Quarterly Report	
Source Name Source Addre Mailing Addre Part 70 Perm Facility: Parameter: Limit:	ess: 817 ess: P.C it No.: T16 Kilr Sul use for pot	D. Box 365, Cayu 25-7633-00002 1 4 fur Dioxide (SO <sub>2</sub> ) 2 less than <del>108.4</del> kiln 4. These usa ential to emit of S fur content of 4.1 12 consecutive r	et, Cayuga, Indiana 47928 ga, Indiana 47928	s are required to limit the sed on a maximum fuel (coal) 2.23 lb of SO <sub>2</sub> / ton fuel used)
Month	_	e this month ons)	fuel usage previous 11 months (tons)	fuel usage last 12 months (tons)
Month 1				
Month 2				
Month 3				
	9 De		I in this month.	

First Significant Permit Modification 165-15184-00002 Amended By: AB/EVP

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## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Part 70 Significant Permit Modification

#### **Source Background and Description**

Source Name: Colonial Brick Corporation

Source Location: 817 West Park Street, Cayuga, Indiana 47928

County: Vermillion SIC Code: 3251

Operation Permit No.: T165-7633-00002
Operation Permit Issuance Date: January 15, 1999
Permit Modification No.: 165-15184-00002
Permit Reviewer: Alic Bent/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Colonial Brick Corporation relating to modification to the clay processing and brick manufacturing operation.

#### History

On January 7, 2002, Colonial Brick Corporation submitted an application to the OAQ stating that the material process capacity and maximum fuel capacity of the brick kilns were inadvertently misrepresented in the original application of the existing permit and requested modification to the permit to reflect the correct values. Based on information received from the Permittee, there have not been any physical changes to the kilns or changes in the method of operation. The maximum capacities of the kilns have remained the same since the date of construction. Therefore, the correction to the maximum capacity values is exempt from new source review and will be reviewed as a Significant Permit Modification. Colonial Brick Corporation was issued a Part 70 permit on January 15, 1999. This Significant Permit Modification will be incorporated into the Part 70 permit.

The requests made by Colonial Brick Corporation are as follows:

- (a) Correcting the maximum capacity of the six (6) small Periodic Brick Kilns by changing it from 460.87 pounds of brick per hour to 1043.38 pounds of brick per hour.
- (b) Correcting the maximum capacity of the five (5) large Periodic Brick Kilns by changing it from 625.5 pounds of brick per hour to 1556.74 pounds of brick per hour.
- (c) Correcting the maximum fuel rate of the six (6) small Periodic Brick Kilns by changing it from 221.24 pounds of fuel per hour to 460.87 pounds of fuel per hour.
- (d) Correcting the maximum fuel rate of the five (5) large Periodic Brick Kilns by changing it from 276.58 pounds of fuel per hour to 625.5 pounds of fuel per hour.

#### **Existing Approvals**

The source was issued a Part 70 Operating Permit (T165-7633-00002) on January 15, 1999.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively incomplete Part 70 Significant Permit Modification application for the purposes of this review was received on January 7, 2002. Additional information received on January 31, 2002.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 through 5).

#### **Potential To Emit Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

Pollutant	Potential Emissions (tons/year)
PM	<del>1,553.30</del> 1,572.47
PM-10	<del>1,525.27</del> 1, <b>541.02</b>
SO <sub>2</sub>	<del>222.18</del> <b>508.33</b>
VOC	<del>0.04</del> <b>0.90</b>
СО	<del>3.35</del> 15.10
NO <sub>x</sub>	<del>82.14</del> <b>154.89</b>

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

The bolded numbers represent the potential to emit at the new maximum capacities of the units while, the stricken numbers represent the potential to emit at the old maximum capacities.

#### **Justification for Modification**

The Title V source is being modified through a Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(B) because the increase in potential  $SO_2$  emissions are greater than 25 tons per year.

#### **County Attainment Status**

The source is located in Vermillion County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vermillion County has been designated as attainment or unclassifiable for ozone.
- (b) Vermillion County has been classified as attainment for all other regulated air pollutants. Therefore, these emissions were reviewed pursuant to the requirements for the prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)	
PM	greater than 100, less than 250	
PM-10	greater than 100, less than 250	
SO <sub>2</sub>	greater than 250	
VOC	less than 250	
СО	less than 100	
NOx	greater than 100, less than 250	

- (a) This existing source is a major stationary source because at least one regulated pollutant is emitted at a rate of 250 tons per year or more.
- (b) These emissions are based upon all previous approvals issued to this source.

#### **Potential to Emit After Controls**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	СО	NO <sub>X</sub>	HAPs
Kiln 1-Kiln 3, Kiln 5-Kiln 11	144.52	113.72	453.91	0.80	13.46	140.84	
Kiln 4	1.57 2.68	<del>1.31</del> <b>2.24</b>	<del>22.23</del> <b>39.76</b> *	0.04 0.07	<del>0.69</del> 1.18	6.21 10.67	
Total Emissions	147.20	115.96	493.67	0.87	14.64	151.51	

Note: The limited potential to emit at the old maximum capacities for Kiln 1 - Kiln 3 and Kiln 5 - Kiln 11 were not included in the Part 70 Permit.

This modification to an existing major stationary source shall limit potential to emit  $SO_2$  from kiln 4 to less than the PSD significant level of 40 tons per year for  $SO_2$ . Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply. (\* For details go to page 4 of the TSD). The bolded numbers represent the limited potential to emit at the new maximum capacities of the units while, the stricken numbers represent the limited potential to emit at the old maximum capacities.

#### **Federal Rule Applicability**

There are no new federal rules applicable to this source during this modification review process. The applicability determination that follows is based on that conducted for the original Part 70 T165-7633-00002, issued on January 15, 1999.

- (a) The kiln operation is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as only the calcining and drying of raw materials prior to firing of the brick are covered for the brick industry. The drying operation is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as the dryer was constructed prior to the rule applicability date of April 23, 1986.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63) applicable to this facility.

#### State Rule Applicability - Entire Source

There are no new state rules applicable to this source during this modification review process. The applicability determination that follows is based on that conducted for the original Part 70 T165-7633-00002, issued on January 15, 1999.

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

This source is a major source under 326 IAC 2-2 (PSD) but has not been through PSD review. This rule applies to sources commencing construction or reconstruction after August 7, 1980. This source was constructed prior to the applicability date. Since 1980 the source has constructed and modified kiln 4, which was constructed in 1985 and modified in 1989. The potential to emit of SO<sub>2</sub> from kiln 4 based on the maximum process capacity of 625.5 pounds of brick per hour and maximum fuel capacity of 276.58 pounds per hour as stated in the original application of the existing permit, was less than 40 tons per year. Therefore, limitations on kiln 4 were not required as the original Part 70 permit T165-7633-00002 was issued on January 15, 1999. Based on the source's emission records, SO<sub>2</sub> emissions from Kiln 4 have always remained at less than 40 tons per year since the kiln was originally constructed. The unlimited potential to emit of SO<sub>2</sub> from kiln 4 based on the correct values of 1556.74 pounds of brick per hour for the material process capacity and 625.5 pounds of fuel per hour for the maximum fuel capacity is 55.0 tons per year. Therefore, for this Title V permit modification, the source shall limit material processed and fuel usage at kiln 4, such that the limited potential to emit of SO<sub>2</sub> is less than 40 tons per 12 consecutive month period to render 326 IAC 2-2 not applicable. The source shall:

- (a) process less than 240.87 tons of brick per 12 consecutive month period, at kiln 4. This process limit is required to limit the potential to emit of SO<sub>2</sub> to less than 16.64 tons (based on an emission factor of 7.2 lb of SO2 / ton brick used) per 12 consecutive month period from kiln 4 due to raw material processing;
- (b) use less than 108.45 tons of fuel with sulfur content of 4.12% or less per 12 consecutive month period, at kiln 4. These usage and fuel sulfur content limits are required to limit the potential to emit of SO<sub>2</sub> to less than 23.12 tons (based on an emission factor of 22.23 lb of SO<sub>2</sub> / ton fuel used) per 12 consecutive month period from kiln 4 due to fuel usage.

Compliance with these limits will limit total  $SO_2$  potential to emit from kiln 4 to less than 40 tons per year and make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3-2 (Process Operations)

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from each of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) shall not exceed 2.65 pounds per hour when each operating at a process weight rate of 1043.38 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

 $2.65 = 4.10 * 0.52 ^{0.67}$  E =  $\frac{1.53}{2.65}$  lb/hr

 $P = \frac{0.23}{0.52}$  ton/hr

According to the emission calculations, each of the six kilns has a potential to emit (PTE) PM of 0.214 pounds per hour, and the source is in compliance with the requirement. (See emission calculations, pages 2 and 3 of 5).

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from each of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 3.46 pounds per hour when each operating at a process weight rate of 1556.74 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 \ P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

 $3.46 = 4.10 * 0.778 ^{0.67}$  E =  $\frac{1.88}{0.31} * 0.778 ^{0.67}$  E =  $\frac{1.88}{0.778} * 0.778 ^{0.67}$  ton/hr

According to the emission calculations, each of the five kilns has a potential to emit (PTE) PM of 0.32 pounds per hour, and the source is in compliance with the requirement. (See emission calculations, pages 2 and 3 of 5).

#### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2(a)(1) (Sulfur Dioxide Emission Limitations) the sulfur dioxide emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) burning a coal and sawdust mixture shall be limited to 6.0 pounds per million Btu of coal. Therefore, the sulfur dioxide (SO<sub>2</sub>) content of coal delivered to the kilns shall be limited to four and six fiftieths percent (4.12%) by weight.

According to the emission calculations, each of the

- (a) six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) have a potential to emit (PTE) SO<sub>2</sub> of <del>1.18</del> **2.22** pounds per mmBtu;
- (b) five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) have a potential to emit (PTE) SO<sub>2</sub> of <del>1.07</del> **2.51** pounds per mmBtu.

and each facility is in compliance with the requirement. (See emission calculations, pages 2 and 3 of 5).

#### 326 IAC 7-2-1(Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-2-1 (Reporting Requirements), the source shall submit to the commissioner upon request: calendar month or average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement

for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The current compliance monitoring requirements do not change as a result of the correction in the maximum capacity of kilns. The compliance monitoring requirements applicable to this source are as follows:

- 1. The kiln operation has applicable compliance monitoring conditions as specified below:
  - Visible emissions notations of each of the kiln operations shall be (a) performed once per shift during normal daylight operations on days 2, 3, and 4 of the firing cycle when exhausting to the atmosphere. A trained employee will record whether emissions are normal or abnormal when exhausting to the atmosphere. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the kiln operation must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

#### Proposed Changes to the Part 70 Permit.

- (a) The following changes have been made to Section A.2 and D.1 of the permit to reflect the change in the maximum capacity of brick:
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

The source consists of the following permitted emission units and pollution control devices:

- (a) One brick firing operation, consisting of the following equipment:
  - (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 460.87 1043.38 pounds of brick per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998),
  - (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 625.5 1556.74 pounds of brick per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998), and

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] One brick firing operation, consisting of the following equipment:

- (1) Six (6) small Periodic Brick Kilns each with a rated heat input of 4 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-3, K-5, K-6, K-7, K-9 and K-10, each with a maximum capacity of 460.87 1043.38 pounds of brick per hour, and exhausting through stacks S-2, S-5, S-6, S-7, S-9 and S-10, respectively (K-6 and K-9 were damaged in a flood and were repaired in 1998),
- (2) Five (5) large Periodic Brick Kilns each with a rated heat input of 5 mmBtu per hour, burning a 57% coal and 43% sawdust mixture, identified as K-1, K-2, K-4, K-8 and K-11, each with a maximum capacity of 625.5 1556.74 pounds of brick per hour, and exhausting through stacks S-1, S-1, S-2, S-4 and S-6, respectively (K-4 was damaged in a flood and was repaired in 1998), and

Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 the source shall:

- (a) process less than 240.87 tons of brick per 12 consecutive month period, at kiln 4.

  This process limit is required to limit the potential to emit of SO<sub>2</sub> to less than 16.64 tons (based on an emission factor of 7.2 lb of SO2 / ton brick used) per 12 consecutive month period from kiln 4 due to raw material processing;
- (b) use less than 108.45 tons of fuel with sulfur content of 4.12% or less per 12 consecutive month period, at kiln 4. These usage and fuel sulfur content limits are required to limit the potential to emit of SO<sub>2</sub> to less than 23.12 tons (based on an emission factor of 22.23 lb of SO2 / ton fuel used) per 12 consecutive month period from kiln 4 due to fuel usage.

These usage limits are required to limit the potential to emit of SO<sub>2</sub> from kiln 4 to less than 40 tons per 12 consecutive month period and make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### D.1.42 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

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Colonial Brick Corporation Cayuga, Indiana Permit Reviewer: AB/EVP

- (a) The SO<sub>2</sub> emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed six (6) pounds per mmBtu of coal combustion.
- (b) The sulfur content of the coal delivered to the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 4.12% by weight, providing the fuel mixture remains 57% coal and 43% sawdust.

#### D.1.23 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations):

- (a) The allowable PM emission rate from each of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) shall not exceed 1.53 2.65 pounds per hour when each operating at a process weight rate of 460.87 1043.38 pounds per hour.
- (b) The allowable PM emission rate from each of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) shall not exceed 1.88 3.46 pounds per hour when each operating at a process weight rate of 625.5 1556.74 pounds per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.1.34 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.1.45 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and SO<sub>2</sub> testing on one of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and one of the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) to verify stack data by the Permittee, utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, and Methods 6, 6A, 6C, or 8 for SO<sub>2</sub>, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.1.56 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed six (6.0) pounds per MMBtu. Compliance shall be determined utilizing one of the following options:

Permit Reviewer: AB/EVP

- (a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:
  - (1) The name of the coal supplier; and
  - (2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and
  - (3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
  - (4) The methods used to determine the properties of the coal; or
- (b) Coal sampling and analysis shall be performed using one of the following procedures:
  - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
    - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
    - (B) Coal shall be sampled at least one (1) time per day;
    - (C) Minimum sample size shall be five hundred (500) grams;
    - (D) Samples shall be composited and analyzed at the end of each calendar month;
    - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
  - (2) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11), using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above shall not be refuted by evidence of compliance pursuant to the other method.

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Cayuga, Indiana Permit Reviewer: AB/EVP

#### D.1.67 Visible Emissions Notations

(a) Visible emission notations of all the kiln stack exhausts shall be performed once per shift during normal daylight operations on days 2, 3, and 4 of the firing cycle when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during days 2, 3, and 4 of the firing cycle.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.78 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the PM and SO2 emission limits established in D.1.1 and, D.1.2 and D.1.3.
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Actual coal usage since last compliance determination period; and
  - (3) Sulfur content, heat content, and ash content; and
  - (4) Sulfur dioxide emission rates; and
  - (5) Vendor analysis of coal and coal supplier certification, if the vendor analysis is used to determine compliance.
- (b) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) MMBtu per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAM.
- (c) To document compliance with Condition D.1.67, the Permittee shall maintain records of daily visible emission notations of the six (6) small periodic brick kilns (ID K-3, K-5, K-6, K-7, K-9 and K-10) and the five (5) large periodic brick kilns (ID K-1, K-2, K-4, K-8 and K-11) stack exhaust.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana 47928

Part 70 Permit No.: T165-7633-00002

Facility: Kiln 4

Parameter: Sulfur Dioxide (SO<sub>2</sub>)

Limit:

process less than 240.87 tons of brick per twelve (12) consecutive month period at kiln 4. This process limit is required to limit the potential to emit of  $SO_2$  to less than 16.64 tons (based on an emission factor of 7.2 lb of  $SO_2$  / ton brick used) per 12 consecutive month period from kiln 4 due to raw material processing.

I CAR:		

Month	brick usage this month (tons)	brick usage previous 11 months (tons)	brick usage last 12 months (tons)
Month 1			
Month 2			

Month 3		
	9	No deviation occurred in this month.
	9	Deviation/s occurred in this month.  Deviation has been reported on:
	Title/	

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### Part 70 Quarterly Report

Source Name: Colonial Brick Corporation

Source Address: 817 West Park Street, Cayuga, Indiana 47928

Mailing Address: P.O. Box 365, Cayuga, Indiana 47928

Part 70 Permit No.: T165-7633-00002

Facility: Kiln 4

Parameter: Sulfur Dioxide (SO<sub>2</sub>)

Limit:

use less than 108.45 tons of fuel per twelve (12) consecutive month period for kiln 4. These usage and fuel sulfur content limits are required to limit the potential to emit of  $SO_2$  to less than 23.12 tons (based on a maximum fuel (coal) sulfur content of 4.12% and an emission factor of 22.23 lb of  $SO_2$  / ton fuel used) per 12 consecutive month period from kiln 4 due to fuel usage.

YEAR:	

Month	fuel usage this month (tons)	fuel usage previous 11 months (tons)	fuel usage last 12 months (tons)
Month 1			

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Month 2				
Month 3				
		ation occurred in th		
	Deviation  Submitted by: Title/Position: Signature: Date: Phone:		ed on:	 

Attach a signed certification to complete this report.

#### Conclusion

The operation of this clay processing and brick manufacturing plant shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. SPM 165-15184-00002.

### Total Source Emissions Appendix A: Emission Calculations

Company Name: Colonial Brick Corporation

Address City IN Zip: 817 West Park Street, Cayuga, IN, 47928

**SPM:** T165-15184 **Plt ID:** 165-00002 **Reviewer:** Alic Bent/ EVP **Date:** 02/25/02

#### Potential Uncontrolled Emissions (tons/year)

**Emissions Generating Activity** 

Pollutant	Kiln Emissions	Kiln Emissions	Pre-Kiln	Unpaved	Conveying &	TOTAL
	from Fuel	from Brick	Emissions	Roads	Handling	
	tons per vear	tons per vear	tons per vear	tons per vear	tons per vear	tons per vear
PM	21.58	12.59	1,499.23	38.46	0.61	1,572.47
PM10	21.58	6.69	1,499.23	13.46	0.06	1,541.02
SO2	286.88	221.45	0.00	0.00	0.00	508.33
NOx	132.41	0.00	22.48	0.00	0.00	154.89
VOC	0.90	0.00	0.00	0.00	0.00	0.90
CO	7.75	7.35	0.00	0.00	0.00	15.10
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00

#### Controlled Emissions (tons/year)

**Emissions Generating Activity** 

Pollutant	Kiln Emissions from Fuel	Kiln Emissions from Brick	Grinder Emissions	Unpaved Roads	Conveying & Handling	TOTAL
	tons per vear	tons per vear	tons ner vear	tons ner vear	tons ner vear	tons per vear
PM	21.03	12.14	74.96	38.46	0.61	147.20
PM10	21.03	6.45	74.96	13.46	0.06	115.96
SO2	279.55	214.12	0.00	0.00	0.00	493.67
NOx	129.03	0.00	22.48	0.00	0.00	151.51
VOC	0.87	0.00	0.00	0.00	0.00	0.87
CO	7.55	7.09	0.00	0.00	0.00	14.64
total HAPs	0.00	0.00	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year, before control.

#### **Kiln Emissions from Brick**

Page 2 of 5 App A

Company Name: Colonial Brick Corporation

Address City IN Zip: 817 West Park Street, Cayuga, IN, 47928

**SPM:** 165-15184 **PIt ID:** 165-00002 **Reviewer:** Alic Bent/ EVP

**Date:** 02/25/02

### Emissions for all eleven (11) Kilns

**Uncontrolled Emissions (tons/year)** 

Maximum rate lbs/hr Maximum rate tons/year 14043.98 61512.6324

**Emissions Generating Activity** 

= medianic Contratinity							
Pollutant	Emissions	Control Efficiency	TOTAL				
	from Kiln						
	pounds per ton		tons per year				
PM	0.41	0.00%	12.59				
PM10	0.22	0.00%	6.69				
SO2	7.20	0.00%	221.45				
NOx	0.00	0.00%	0.00				
VOC	0.00	0.00%	0.01				
СО	0.24	0.00%	7.35				
total HAPs	0.00	0.00%	0.00				
worst case single HAP	0.00	0.00%	0.00				

#### Methodology:

#### **Kiln Emissions from Fuel**

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Company Name: Colonial Brick Corporation

Address City IN Zip: 817 West Park Street, Cayuga, IN, 47928

**SPM:** 165-15184 **Plt ID:** 165-00002 **Reviewer:** Alic Bent/ EVP

**Date:** 02/25/02

### Emissions for all eleven (11) Periodic Brick Kilns

**Uncontrolled Emissions (tons/year)** 

Maximum rate lbs/hour Maximum rate tons/year

	589	2.72	2	
- 2	25,8	310.1	1	

**Emissions Generating Activity** 

= moderno o o moderni, g / to m/s,						
Pollutant	Emissions	Control Efficiency	TOTAL			
	from Kiln					
	pounds per ton		tons per year			
PM	1.67	0.00%	21.58			
PM10	1.67	0.00%	21.58			
SO2	22.23	0.00%	286.88			
NOx	10.26	0.00%	132.41			
VOC	0.07	0.00%	0.90			
СО	0.60	0.00%	7.75			
total HAPs	0.00	0.00%	0.00			
worst case single HAP	0.00	0.00%	0.00			

#### Methodology:

#### **Kiln Emissions from Brick**

Page 4 of 5 App A

Company Name: Colonial Brick Corporation

Address City IN Zip: 817 West Park Street, Cayuga, IN, 47928

**SPM:** 165-15184 **PIt ID:** 165-00002 **Reviewer:** Alic Bent/ EVP

**Date:** 01/25/02

#### Emissions for Kiln 4

#### **Uncontrolled Emissions (tons/year)**

Maximum rate lbs/hr 1556.74
Maximum rate tons/year 6818.5212

**Emissions Generating Activity** 

Emissions Constantly Neuvity					
Pollutant	Emissions	TOTAL			
	from Brick				
	pounds per ton	tons per year			
PM	0.41	1.40			
PM10	0.22	0.74			
SO2	7.20	24.55			
NOx	0.00	0.00			
VOC	0.00	0.00			
СО	0.24	0.81			
total HAPs	0.00	0.00			
worst case single HAP	0.00	0.00			

#### Uncontrolled Emissions (tons/year)

Maximum rate lbs/hr 625.5

Maximum rate tons/year 2739.69

**Emissions Generating Activity** 

Pollutant	Emissions from Kiln Fuel	TOTAL	TOTAL	TOTAL
	pounds per ton	tons per year	tons per year	tons per year
PM	1.67	2.29	1.40	3.68
PM10	1.67	2.29	0.74	3.03
SO2	22.23	30.45	24.55	55.00
NOx	10.26	14.05	0.00	14.05
VOC	0.07	0.10	0.00	0.10
СО	0.60	0.82	0.81	1.64
total HAPs	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00

#### Methodology:

#### **Kiln Emissions from Brick**

Page 5 of 5 App A

Company Name: Colonial Brick Corporation

Address City IN Zip: 817 West Park Street, Cayuga, IN, 47928

**SPM:** 165-15184 **PIt ID:** 165-00002 **Reviewer:** Alic Bent/ EVP

**Date:** 01/25/02

#### Emissions for Kiln 4

#### Controlled Emissions (tons/year)

Maximum rate lbs/hr 1055
Maximum rate tons/year 4620.9

**Emissions Generating Activity** 

Pollutant	Emissions	TOTAL	
	from Brick		
	pounds per ton	tons per year	
PM	0.41	0.95	
PM10	0.22	0.50	
SO2	7.20	16.64	
NOx	0.00	0.00	
VOC	0.00	0.00	
СО	0.24	0.55	
total HAPs	0.00	0.00	
worst case single HAP	0.00	0.00	

#### Controlled Emissions (tons/year)

Maximum rate lbs/hr
Maximum rate tons/year

475
2080.5

**Emissions Generating Activity** 

Pollutant	Emissions	TOTAL	TOTAL	TOTAL
	from Kiln Fuel			
	pounds per ton	tons per year	tons per year	tons per year
PM	1.67	1.74	0.95	2.68
PM10	1.67	1.74	0.50	2.24
SO2	22.23	23.12	16.64	39.76
NOx	10.26	10.67	0.00	10.67
VOC	0.07	0.07	0.00	0.07
СО	0.60	0.62	0.55	1.18
total HAPs	0.00	0.00	0.00	0.00
worst case single HAP	0.00	0.00	0.00	0.00

#### Methodology: